DESCRIPTIONS OF NEW SPECIES OF AUSTRALIAN COLEOPTERA.

BY ARTHUR M. LEA.

Part IX.

(Plate xvii.)

Family STAPHYLINIDÆ.

ŒDICHIRUS GENICULATUS, n.sp.

Head, prothorax, and mesosternum red; elytra, abdomen, and metasternum black: appendages (knees infuscated) flavous. With rather stiff scattered setæ or hairs.

Head somewhat wider than long, gently convex, with fairly large, scattered punctures. Antennæ thin, extending almost to tip of elytra. *Prothorax* slightly longer than wide, slightly wider than head, widest at about the apical fourth, thence oblique to near base, which is rounded; with moderately numerous distinct punctures, most of which are in irregular longitudinal series. *Elytra* shorter and narrower than prothorax, sides rounded, apex incurved to middle; with punctures the size of those on prothorax, but more evenly distributed. *Abdomen* long, and tipped with two acute spines; four basal segments with dense and coarse punctures, except at their tips, the two apical segments with smaller punctures. *Legs* rather long, front tarsi strongly inflated. Length 7, to apex of elytra $2\frac{1}{2}$ mm.

Hab.—Victoria : Timboon(H. W. Davey).

Close to *E. rubricollis*, and *E. tricolor*; from the former, distinguished by its much paler legs and red head; and, from the latter (to which it is closer), by its black elytra.

SCOPÆUS ROTUNDICOLLIS Macl.(now SUNIUS).

I have recently examined the type of this species. It is a *Sumins*, close to *S. brevicollis*, but slightly smaller, and with the markings on the elytra of one specimen confined to the basal third; and, on the other, to the basal two-thirds; the antennæ

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are also shorter. The punctures on both head and prothorax are of the characteristic form of those of *Sunius*.

Family PSELAPHIDÆ.

The late Rev. R. L. King's Collection was allowed to get into extremely poor condition before it was acquired by the Australian Museum, but the *Pselaphidæ* and *Scydmænidæ* fortunately escaped destruction, a fate that befell some of his types in other families.

In Sydney, recently (September, 1910), I examined his types of *Pselaphida*, as well as those of Macleay's from Gayndah. The types of all their species are there, with the following exceptions.

TYRUS VICTORIÆ King (now PALIMBOLUS).

Described from Castelnau's Collection, and probably never retained by King. The species supposed to be this, was described by Raffray as a *Didimoprora*, and consequently is now referred to *Palimbolus*. It is not represented at all in the King Collection.

BRYAXIS INSIGNIS King(now RYBAXIS).

This species is represented in the Australian Museum by two Tweed River specimens, that were apparently taken by myself, and were certainly never seen by King. The species, however, is the same as the one identified by Raffray.

EUPLECTUS EXCISUS King(now EUPLECTOPS).

The specimen in the Howitt Collection, redescribed in Proc. Roy. Soc. Victoria, 1910, p.13, as the type or a cotype of this species, appears to be really the type. There is, in the King Collection, a specimen labelled "Euplectus excisus R.L.K.(?)" but it is from Cape Schank, and does not agree well with the original description.

TYRUS HOWITTI King (now TYROMORPHUS).

RYTUS VICTORIÆ King.

BRYAXIS ATRA King (now EUPINES).

BYTHINUS NIGER King(now EUPINES).

The types of these species are in the Howitt Collection, and are not represented at all in King's. In addition to the specimens mounted on cardboard, there are numerous others mounted as slides for the microscope, with the names scratched on the glass.

Many of the carded specimens were extremely dirty; I obtained permission to float off and clean some of these, and note of them as follows :---

TYCHUS OBLIQUUS King(now EUPINES).

The types are males. The abdomen has a small tubercle near the apex of the second segment on the under-surface. The legs, at least the four hind ones, are unarmed, but I was unable to examine the front ones very clearly on either specimen. The tenth joint is very curious, being placed obliquely to the rest of the antenne. There is also a male mounted as a slide. The species is omitted from Raffray's recent monograph in Wytsman's "Genera Insectorum."

EUPINES VICTORIÆ King.

The types are females. They appear to be partly dark specimens of *Enpines polita* King(Bryaxis of King), judged by the types of that species, and they agree in all details with female specimens in my collection, identified as *E. polita* by Raffray.

EUPINES GEMINATA King.

There are two specimens in the Collection, one certainly female, the other probably so; but, on being floated off, its under-surface was so dirty, that it could not be carefully scrutinised, and the legs were so huddled together that they could not be examined for armature.

RYTUS CORNIGER King.

In general appearance very close to R. Kingi, but much paler, and with the elytral punctures smaller; it is also more sparsely clothed.

BATRISUS CYCLOPS King (now BATRISODES).

Bryaxis hirta Macl.

The types of these were compared side by side, and found to be identical. King's is the older name. Raffray (Proc. Linn. Soc. N. S. Wales, 1900, p. 137, Pl. x., fig. 28), described and figured as *B. cyclops*, a species, from the type of *R. giraffa*, which he supposed to be identical with *B. cyclops*; but, in this, he was evidently mistaken, as *B. cyclops* is a distinct species. The species he doubtfully described as *B. hirta* (p. 139) was correctly identified.

BATRISUS ELIZABETHÆ King (now BATRISODES).

A small, pale species, base of abdomen on upper surface with three impressions occupying almost the entire width, the median one as wide as the others conjoined. The dorsal stria on each elytron is strong, and continued to well beyond the middle. The legs are apparently unarmed, and the type is evidently a female.

BATRISUS CONSPICUUS King (now MESOPLATUS). Mesoplatus Mastersi Raffr.

There are two female specimens standing under this name in the King Collection, although but one was known to King when the species was described. Raffray subsequently described the species as *Mesoplatus Mastersi*; both he and King referred to its resemblance to *M. barbatus*.

BATRISUS NOBILIS King (now TYROMORPHUS).

In Proc. Roy. Soc. Vic. 1910, p. 149, with some slight doubt I identified a Batrisodes as belonging to this species; but the type of *B. nobilis* is not even near *Batrisodes*, as its abdomen is strongly margined. Its legs are unarmed, but as the under-surface of its abdomen is feebly, longitudinally impressed, it is possibly a male. The head is shallowly, longitudinally impressed, the impression at its hind end being marked by two fovea. The prothorax has a biarcuate impression near the base. The dorsal stria on each elytron is represented by a small basal fovea, behind which is a very faint longitudinal impression. There are fairly distinct punctures on the whole of the upper surface. A second specimen is in the Macleay Museum, from Rope's Creek. I did not examine the palpi of the type, having compared it with the Rope's Creek specimen, and intending to look at those of the latter very carefully. The latter specimen, however, has one palpus entirely, and the other partly missing. It is impossible, therefore, to be sure as to its genus, but it appears to belong to *Tyromorphus*.

FARONUS PUNCTATUS King (now Somatipion).

Somatipion globulifer Schfs.

There are two King George's Sound specimens in the Macleay Museum, that agree well with the description and Raffray's figure of *Somatipion globulifer*; they also agree with the type of *Faronus punctatus*. The remarkable median line on the upper surface of the abdomen is quite as distinct on King's type as on any other of the numerous specimens before me, but no mention of it was made by King.

BRYAXIS ÆQUATA King (now EUPINES).

Eupinoda diversicornis Raffr.

There are five female specimens standing under the name of *aequata* in the King Collection. In the Macleay Museum, there is a specimen from Elizabeth Bay, labelled as the male of *B. aequata*, and the ninth joint of the antennæ is as described. This specimen agrees with others in my collection, identified by Raffray as his *Eupinoda diversicornis*, and it agrees well with his description and figure of the antennæ. In his recent monograph, the species is transferred to *Eupines*.

RYTUS EMARGINATUS King.

On the card bearing the presumable types of this species, there are four specimens. One is a male, and agrees with the description; in general appearance it is extremely close to R. Kingi, but its cephalic structure is not quite the same, and its punctures are finer. Two of the others are females of the species, but the fourth specimen belongs to *Batraxis Armitagei*.

SAGOLA AUSTRALLE, n.Sp.

Q. Reddish-castaneous, head and pronotum somewhat darker than elsewhere. Moderately clothed with rather long, yellowish pubescence.

Head transverse: with two rather large interocular fovee; in front with two wide antennary ridges, separated by a narrow and rather deep impression. Antennæ extending to about basal third of elytra, of almost even width throughout. *Prothorax* slightly wider than head, and slightly wider than long, widest near apex, thence oblique to base; with a large, deep, median fovea near base, sides near base foveate. *Elytra* at base slightly wider than widest part of prothorax, sides gently increasing in width to near apex; each with a strong subsutural stria marked by several small but deep impressions near base, dorsal stria represented by a deep subbasal fovea, and a short groove not quite extending to middle. *Abdomen* large, strongly margined, sides dilated to beyond the middle, apex pointed. *Legs* not very long. Length $2\frac{1}{4}$ - $2\frac{1}{3}$ mm.

Hab.-New South Wales (Macleay Museum).

I have described the four specimens before me, although they are all females, as the genus is an interesting one, and is now *first recorded from the mainland. The species is readily distinguished from S. Tasmania, by its very different elytral impressions.

BATRISODES SCULPTICOLLIS, n.sp.

of. Flavous. With rather long, sparse, pale hairs.

Head slightly convex, a shallow median line from base almost to middle; a deep groove on each side of middle, starting level with the eye, and opening out near antennæ, so that the antennary ridge is very distinct; punctures sparse and rather indistinct. *Prothorax* widest at about apical third, where the width is about equal to the length, each side in

^{*} There are specimens of the genus from Mount Kosciusko in the Australian Museum.

front with a small punctate space; disc strongly elevated along middle, and then abruptly cut away and irregular, the apex strongly elevated; towards each side with a curved impression, commencing near the base in a fovea, another fovea in the middle connected with the lateral ones; and several small basal foveæ; without conical tubercles towards base. *Elytra* rather short, with a fairly large impression between each side and suture, from which a dorsal stria can be traced almost to middle; shoulders unarmed; punctures sparse and rather indistinct. *Abdomen* on upper surface with feeble tubercles somewhat obscuring the basal impressions; lower surface feebly flattened along middle. *Legs* rather long and apparently unarmed. Length, 2mm.

Ilab.-N. S. Wales: Blue Mountains (E. W. Ferguson).

The punctate latero-frontal spaces of the prothorax are much as in *B. apicicollis*, but that segment, from the side, appears to have two deep notches in front, the notches leaving a strong, blunt, sublaminate projection in front, and an acute projection between the front and middle (from certain directions, two acute projections can be seen). From directly in front it appears to be triangularly elevated at apex, then with two small acute elevations, and then with the middle strongly raised and feebly notched. The prothorax of *B. insignicollis*, when viewed from the side, appears somewhat similar; but the notches are not so deep, it has no acute elevations, and the frontal one is much smaller and less prominent; from directly in front it appears very different.

From some directions, the medio-lateral grooves of the head appear to be regularly and deeply cut: but, from others, each appears foveate at its base, with a narrow groove opening out in front. On the type, only six joints of each antenna are left; they are rather thin, the second joint as long as the first (but, from some directions, appearing decidedly longer), and the fifth slightly longer than the fourth or sixth. I have described the specimen, however, as the sculpture of the prothorax is very peculiar.

BATRISODES LATICOLLIS, n.sp.

of. Flavous. With rather long pale hairs.

llead rather convex, and with a feeble median carina ; near each eye with a round fovea opening out in front ; antennary ridges very conspicuous; punctures rather indistinct. Antennæ long and rather thin, second joint(as viewed from the side) distinctly shorter than first, third and fourth shortest of all, seventh slightly longer than sixth or eighth, ninth and tenth each almost as long as seventh and eighth combined, eleventh longer and wider. Prothoras decidedly transverse, suddenly inflated at apical third, the inflated space rather densely punctate; from middle of disc, which is notched, to apex irregularly sculptured; towards each side with a distinctly impressed line, commencing near the base in a fovea, an irregular subbasal median fovea connected with the lateral ones, its sides marked by two feeble tubercles; at extreme base with a few small fovce. Elytra about as long as wide; shoulders oblique, and scarcely armed; dorsal striæ not traceable to middle, but towards base very distinct; punctures sparse and small. Abdomen with a few feeble tubercles obscuring the impressions at base of upper surface; flattened along middle of under-surface, apex with a small fovea. Legs long and apparently unarmed. Length 2 (vix) mm.

Hab.-New South Wales (type in Macleay Muscum).

The apex o^c the prothorax, at a glance, seems somewhat as in *B* apicicollis, but is essentially different: the prothorax itself is decidedly wider, the punctate latero-frontal spaces are less convex and less rounded; the elytra are shorter, with rather more distinct punctures, and with more deeply impressed striæ. There is also a considerable difference in colour, although this may be individual rather than specific. At first, it almost appears to be a small pale form of *B. gibbicollis*, but the prothorax of that species, when viewed from behind, appears to have a deep basal fovea, in front of which is an elevated ridge that terminates (at the notch) in advance of the punctate spaces. In the present species, the surface in front of the foveæ, although convex, does not appear to be ridged, and the notch (when viewed from behind) appears to be behind the punctate spaces. The excavated parts at the apex are also not quite the same, although partly obscured by clothing in both species.

BATRISODES MACROCEPHALUS, n.sp.

 σ^* . Dark castaneous, appendages somewhat paler. With comparatively short, depressed clothing.

Head large, strongly convex; with a large, deep, irregular fovea close to base on each side of middle; densely and coarsely punctate. Antennæ, for the genus, not very thin, ninth and tenth joints each about as long as wide. Prothorax moderately transverse, about as wide as head across eyes: apex narrow, then sides strongly rounded to middle, and thence (commencing at a small spine) strongly coarctate to base, two narrow carinæ marking off a very narrow median line, which commences in a subbasal fovea ; sides irregularly foveate ; between middle and each side with two narrow carinæ, commencing near the base (where they are conjoined) in a small but very acute tubercle or spine; with distinct punctures. Elytra convex, about as long as wide, shoulders oblique, and each with a feeble tubercle, dorsal striæ traceable only at about basal fourth; with fairly numerous, clearly defined punctures. Abdomen with rather small but distinct punctures, base of upper surface with the lateral impressions wide, and the median very small; under-surface feebly concave along middle, the apical segment with a wide shallow impression. Legs not very thin; four front tibiæ thickened about middle; the hind pair longest, somewhat curved, and thickened towards apex; middle trochanters each with a small acute tooth, the hind ones each with a small strongly curved tooth. Length $1\frac{4}{5}$ -2 mm.

Q. Differs in having the head smaller and less convex, the foveæ much smaller and disconnected, the shoulders less promi-

nent, under-surface of abdomen gently convex along middle, and legs unarmed.

Hab.—Queensland: Wide Bay and Gayndah (Macleay Museum).

The head of the male is unusually large and convex for the genus: the two large, basal foveæ are feebly connected across the middle. The teeth of the hind trochanters, although hooklike, and very distinct from some directions, are usually difficult to see, especially on old and dirty specimens.

BATRISODES BIFOVEICEPS, n.sp.

J. Reddish-castaneous, appendages slightly paler. Moderately clothed with comparatively short, suberect pubescence.

Head moderately large; with two very large, deep, irregular foveæ, separated by a strong ridge, which is transversely impressed near its base; punctures of moderate size, and rather numerous. Antennæ, for the genus, not very thin. Prothorax feebly transverse, sides increasing in width from apex to middle, where there is a feeble tubercle, thence coarctate to base; a carina along middle almost from base to apex, narrowly impressed along its middle; on each side of middle, near base, with a small acute tubercle or spine, marking the starting point of two slightly diverging carinæ; each side of base with a fovea, marking the end of a lateral impression, the foveæ not connected with the median one, which is very small. Elytra much as in the preceding species, except that the punctures are rather smaller. Abdomen as in the preceding species, except that the punctures are much less distinct. Legs rather stout; four hind trochanters with small, acute teeth. Length $1\frac{4}{5}$ -2 mm.

Q. Differs in having the head smaller; the foveæ much smaller, shallower, and disconnected; a feeble carina between them; abdomen moderately convex along middle of undersurface, and legs unarmed.

Hab. -Queensland: Brisbane (Macleay Museum).

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Allied to the preceding species, but the head of the male not quite so large or convex, and the punctures sparser and considerably smaller. The foveæ are considerably larger, more open, less basal, and of a different shape. From some directions, the head appears to have a large, median, elongated tubercle. The median carina of the prothorax, from some directions, appears solid; but, from others, an impressed line can be traced down its middle. The teeth of the hind trochanters are rather short, subtriangular, and not at all curved.

BATRISODES RUGICORNIS Raffr.

Including a co-type, there are now before me (from Glen Innes, Murrurundi, and Hunter River, in New South Wales; and Dalveen in Queensland) 37 specimens of this species; but, as they all have the hind trochanters with a long curved tooth, they are doubtless all males. I have seen no specimens that can be confidently identified as females.

BATRISODES HAMATUS King.

There are before me, eleven specimens of this species; eight are reddish-castaneous, but three are flavous, and agree exactly in sculpture with the darker ones. The female differs from the male in being slightly larger, and more robust; the under-surface of abdomen more convex, and the trochanters unarmed.

BATRISOCENUS TIBIALIS King.

The female of this species differs from the male in having all the trochanters unarmed, the front tibiæ simple, the under-surface of abdomen more regularly convex, and the head less convex along middle.

EUPINES FLAVOTERMINALIS, n.sp.

 σ . Of a dingy piceous-brown, legs somewhat paler, head black, apical joint of antennæ flavous. Almost quite glabrous.

Head rather small, with two very feeble impressions in front. Antennæ rather long and thin, ninth joint rather small but distinctly larger than eighth, and about one-half the size of tenth, eleventh ovate. *Prothorax* moderately transverse, widest slightly in advance of middle, the sides thence oblique to base. *Elytra* rather large, sides rounded and dilated from base to near apex, sutural stria distinct, the dorsal entirely absent. *Abdomen* very feebly margined on upper surface, lower with a small tubercle towards apex of second segment. *Metasternum* with a very wide and rather shallow depression. Front and hind *tibiæ* shallowly notched towards apex. Length l_4^1 mm.

Hab.—Tasmania: Latrobe, in flood-débris(A. M. Lea).

In general appearance, remarkably close to E. inermis, but slightly larger, tenth joint of antennæ conspicuously darker than eleventh, metasteruum darker, and with a much wider impression, and tibiæ different.

EUPINES ALCYONE, n.sp.

o'. Castaneous : elytra (except suture), sterna, and appendages somewhat paler than the other parts. With very short, sparse, adpressed pubescence, denser (but still sparse) on abdomen than elsewhere.

Head moderately large, with a small, round, deep fovea close to each eye, and with two shallow impressions in front. Antennæ not very long, ninth joint lightly, the tenth strongly transverse, eleventh briefly ovate. Prothorax distinctly transverse, widest close to apex, the sides thence subcoarctate to base. Elytra scarcely as long as wide; subsutural stria very feeble, the dorsal represented by a feeble basal impression: with small and rather sparse but distinct punctures. Metasternum widely and shallowly impressed. Abdomen with two small swellings at apex of second segment on under-surface. Legs apparently unarmed. Length $1\frac{1}{4}$ mm.

Hab.-Queensland: Townsville (H. H. D. Griffith, from F. P. Dodd).

In general appearance like a very small *Tyromorphus*. The elytral pubescence is extremely short; but, in certain lights, quite distinct; the subsutural stria on each elytron is so extremely faint, that it might quite fairly be regarded as absent.

EUPINES INNUBIS, n.sp.

 σ . Bright castaneous. Abdomen sparsely pubescent, elsewhere almost or quite glabrous.

Head rather small, with a small fovea close to each eye, and with two feeble impressions in front. Antennæ rather long, fifth joint slightly inflated, ninth strongly transverse but no longer than eighth; tenth large, its apex produced on one side; eleventh considerably larger than tenth, briefly and irregularly ovate. *Prothorax* moderately transverse, widest close to apex, thence the sides coarctate to base. *Elytra* slightly wider than long, sides increasing in width from base almost to apex; subsutural stria distinct, the dorsal entirely absent; with a few rather indistinct punctures. *Metasternum* rather narrowly impressed along middle. Under-surface of *abdomen* feebly flattened along middle, apical segment very shallowly impressed. *Legs* rather long and apparently unarmed. Length, 1 mm.

Q. Differs in having the head slightly smaller; the tenth joint of antennæ much smaller, transverse, and of regular shape; the eleventh smaller, and inserted on middle of tenth; and the legs somewhat shorter.

Hab.-New South Wales: Sydney (Macleay Museum).

In general appearance, close to E. aurora, E. litoralis, E. claratula, E. capitata, and the pale form of E. polita, but readily distinguished therefrom by the tenth joint of the antennæ of the male; the tenth seems to be separated from the eleventh by a short additional joint, so that it appears to be really the ninth, but the suppositions joint is really a small produced part of the tenth itself. The fifth joint, although decidedly larger than the fourth or sixth, is not large enough to entitle the species to be placed with such others as E. nigricollis and E. globulifer, &c.

From some directions, the second segment of abdomen of the male, on its fundersurface, appears to have a very minute granule about its middle, but it is invisible from most directions.

EUPINES (BYRAXIS) IMPLUMIS, n.sp.

 \mathcal{O}^{*} . Of a rather dingy pale castaneous. Almost glabrous.

Head transverse; with two very shallow impressions in front. Antennæ not very long; ninth joint larger, produced to one side, and the tenth placed on that side instead of at its middle; tenth ovate, scarcely larger than ninth. Prothorar lightly transverse, widest towards apex, thence the sides suboblique towards base. Elytra rather more convex than usual, about as long as wide; subsutural stria feeble, the dorsal absent. Metasternum deeply impressed along middle, the impression dilated to apex. Under-surface of abdomen with two tubercles at apex of second segment, the space between depressed, apical segment with a shallow fovea. Legs rather long, and apparently unarmed. Length, 1 mm.

Hab.-Queensland: Cairns (E. W. Ferguson).

Apparently allied to E. melanocephala, but smaller and of uniform colour. The ninth joint of the antennæ is somewhat as in E. obliqua, although not quite the same, but the fifth joint and the abdomen are very different. The ninth joint will readily distinguish the species from all others of the genus. The subsutural stria, on each elytron, is fairly distinct at the tip, but elsewhere is almost or quite invisible. Dr. Ferguson sent three males for examination, but no females. The antennæ are composed of but ten joints (I have examined them carefully, both from above and below), which associates the species with E. Elizabethæ in the subgenus Byraxis, a species it resembles to a certain extent, but differs essentially from in the club,

EUPINES CONCOLOR Sharp.

There are, before me, three specimens from Victoria, and five from South Australia, that appear to belong to this species. Sharp described the second ventral segment as having a small tubercle at its apex; the males now under examination have a small tubercle, but it is not at the extreme tip of the segment (as in several other species having the second segment tuberculate or fasciculate), but at about one-fourth from the tip.

The female (unknown to both Sharp and Raffray) differs from the male in having the tenth joint of the antennæ much smaller, the abdomen convex and non-tuberculate on its under-surface, and the metasternum with a smaller and shallower depression.

Var. ADELAIDENSIS, n. var.—Mr. H. H. D. Griffith has sent numerous specimens from Adelaide, that appear to represent a variety of this species. They agree exactly in all structural details with the typical form, but differ in having the head and basal two-thirds of abdomen (both surfaces) varying from rather lightly infuscate to black. The metasternum also is sometimes as dark as the abdomen, but occasionally is no darker than the elytra.

EUPINODA HIRTICEPS, n.sp.

 \mathcal{J} . Dark castaneous-brown; elytra bright castaneous, but suture, base, and apex infuscated; legs, palpi, and two apical joints of antennæ flavous. Head with rather dense, pale hairs; abdomen sparsely public ent, elsewhere with a few rather long hairs.

Head wide, with a strong median carina, apparently foveate towards base. Antennæ long and thin, ninth joint rather small but about twice the size of eighth, tenth about twice as long as ninth, and produced on one side of apex, eleventh ovate. *Prothorax* almost as long as wide, sides rather strongly inflated in front of the middle. *Elytra* rather large, slightly longer than wide; sutural stria distinct, the dorsal represented by a feeble basal impression; impunctate. *Metasternum* impressed along middle. Undersurface of *abdomen* with a longitudinal carina or tuberele towards base, apex foveate. *Trochanters* apparently unarmed; front tibiæ simple, hind pair dilated and fasciate at inner apex. Length $1\frac{1}{2}$ mm.

Hab.—N. S. Wales : Rope's Creek (type in Macleay Museum).

In general appearance strongly resembles *E. amplipes*, but with the prothorax black, the head hairy, and the front legs different. The head appears to be rather flat, and, in places, foveate, but its sculpture is greatly obscured by the clothing.

RYBAXIS MACLEAYI, n.sp.

 \mathcal{J} . Reddish-castaneous, head sometimes dark; antennæ with apical joint flavous, some of the preceding joints black or blackish. With short, pale pubescence.

Head moderately large; with two fairly large, round, closed foreæ between eyes, and a moderately deep impression or open fovea in front. Antennæ with first joint rather long, fifth slightly longer but thinner than fourth, sixth about as long as fourth; seventh the length of sixth, but considerably wider; eighth small but transverse; ninth moderately large, transversely suboblong; tenth longer but not wider than ninth; eleventh scarcely as long as ninth and tenth combined, its apex slightly produced on one side. Prothorax feebly transverse, widest at apical third, with a very feeble medio-basal fovea, but a distinct curved impression continued to each side from same, each impression terminating in a large fovea. Elytra almost as long as wide, each with the sutural stria distinct, the dorsal distinct to near apex, at its apex directed slightly outwards; epipleural furrow deep, lightly curved, not quite extending to base or apex; punctures rather indistinct. Metasternum widely impressed in middle, each side with an obtuse tooth overhanging the posterior coxa. Abdomen flattened along middle of under-surface. Legs rather stout; trochanters unarmed; front tibiæ dentate slightly nearer base than apex. Length 2-21 mm.

Q. Differs in having the head smaller, antennæ shorter, third to eighth joints subequal in size, tenth considerably larger and wider than ninth, and eleventh longer than ninth and tenth combined; metasternum unarmed and much less excavated along

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middle; abdomen rather strongly convex along middle of undersurface, and legs unarmed, and somewhat thinner.

Hab.-N. S. Wales : Richmond River(Macleay Museum).

Belongs to a rather numerous group of species that, at first sight, all look much alike, but are usually readily distinguishable by the antennæ, legs, and under-surface of the males. In general appearance, it is very close to R. parvidens, but the front tibiæ of the male are more conspicuously armed in the middle, the metasternum differently armed, and the antennæ not quite the same. R, quadrituberculata, to which it is also allied, has the armature of the front tibiæ nearer the apex than base. R. adumbrata also has the tibial armature nearer the apex than base, and differs also in the metasternum and antennæ. R. quadriceps has the seventh and eighth joints acutely produced inwards, but is very close in other respects. R. grandis appears to be allied, but its female (the only sex known) is described as having its apical ventral segment bi-impressed. There are several species, the females of which almost exactly fit the description of R. grandis. R. optata, from Victoria, is described as having the prothorax "with no trace of the central fovea." Its legs are not mentioned, but it belongs to a group, the males of which nearly always have very distinctive legs.

The head is sometimes considerably darker than the prothorax (both sexes), the dark joints of the antennæ vary in number from five (6th-10th) to two (9th-10th). From some directions, the seventh joint appears no wider than the sixth; the ninth, on some of the males, appears to have a small process on one side of its apex, but this may be due to matted pubescence.

RYBAXIS METASTERNALIS, n.Sp.

3. Pale reddish-castaneous, abdomen somewhat darker, legs (knees excepted) and palpi flavous. With short pale pubescence.

Head with a fairly large, round, closed fovea close to each eye, a shallower one in front. Antennæ thin, none of the joints transverse, fifth slightly larger than sixth, and just perceptibly larger than fourth, eighth smallest of all; ninth distinctly longer and wider than eighth, and smaller than tenth; eleventh subovate, about as long as ninth and tenth combined. *Prothorax* distinctly transverse, sides strongly rounded, and widest slightly in front of the middle; foveæ and impressions as in the preceding species, except that the medio-basal fovea is more distinct, although not large. *Elytra* slightly wider than long, each with the sutural stria distinct, the dorsal distinct at base, and traceable to about apical fourth; epipleural furrow deep, moderately curved, terminated at about basal fifth and apical fourth; with numerons feeble punctures. *Metasternum* with a distinct process or tooth, commencing near its apex, and extending to between middle coxe, its tip upturned. *Abdomen* irregularly excavated on under-surface, and with feeble tubereles. *Legs* moderately stout; front tibiæ obtusely dentate almost in exact middle. Length $2\frac{1}{4}$ nm.

Hab. N. S. Wales : Rope's Creek (Macleay Museum).

Readily distinguished from all other described species by the remarkable process on the metasternum, which is very distinct from the sides; the process is somewhat similar to that on the males of several species of *Mandalotus* (*M. hoplostethus*, *M. intercoxalis*, etc.), only it is placed on the metasternum, instead of on the mesosternum. There were two males of the species, in the Macleay Museum, standing under the name of *R. optata*, but they are not even close to the description of that species, differing in the abdomen, metasternum, prothorax, antenne, &c.

RYBAXIS SANGUINIPENNIS, n.sp.

J. Black, elytra red, legs and palpi flavous, antennæ reddish, club black or blackish. With very short, whitish pubescence.

Head with a moderately large, round, closed fovea close to each eye, a rather shallow depression in front. Antennæ rather thin, first joint moderately long, second shorter but no thinner, third, fourth, and fifth rather thin and subequal, sixth and seventh slightly shorter, eighth shorter still, ninth longer and wider than eighth, and shorter and narrower than tenth, eleventh subovate, slightly wider than tenth, and about as long as ninth and tenth combined. *Prothorax* moderately transverse, sides strongly rounded, widest at about apical third; foveæ and impressions much as in *R. Macleayi. Elytra* almost as long as wide; each with the sutural stria very distinct, and commencing in a small fovea, dorsal stria distinct at base and traceable to apical fourth, at its apex curved slightly outwards; epipleural furrow deep, lightly curved, commencing at basal and terminating at apical fifth; punctures very indistinct. *Metasternum* rather widely impressed along middle. *Abdomen* flattened along middle of under-surface. *Legs* rather stout; four front tibiæ feebly dentate almost at apex. Length $1\frac{1}{2}$ - $1\frac{2}{3}$ mm

Q. Differs in having shorter antennæ, metasternum less impressed along middle, abdomen convex along middle of undersurface, and legs thinner and unarmed.

Hab.—Tasmania: Latrobe; five specimens, from flood-débris (A. M. Lea).

In general appearance close to R. atriclava, but with the front tibiæ dentate almost at apex, instead of near middle, the middle pair also dentate, and the hind pair unarmed; the dentition is not very pronounced, and, at first, appears to be due to pubescence. R. Harti, which also has the four front tibiæ dentate, has the teeth in very different positions; it is also a smaller and paler species.

The colour is somewhat variable. Some specimens have the prothorax deep black; in others, it is not much darker than the elytra; the metasternum also varies from blackish to a dingy red; the apex of the abdomen is reddish; and, on the under-surface, the red sometimes extends to the base; the dark joints of the antennæ vary in number from three (the club) to five.

RYBAXIS FOVEICOLLIS, n.sp.

Pale eastaneous; tip of abdomen, palpi, and tarsi more or less flavous. With moderately dense, short, whitish pubescence.

Head with a round and almost closed fovea close to each eye, and with a wide and rather shallow depression in front, its front marked by a curved ridge connecting the bases of the antennæ. Antennæ short, first joint longer but no wider than second, third to eighth small, ninth slightly wider than eighth, and narrower than tenth; eleventh ovate, considerably wider than tenth, and about as long as the four preceding combined. *Prothorax* widely transverse, widest at about apical third, with a wide, deep, mediobasal fovea, connected by a short impression on each side with a large lateral fovea. *Elytra* subquadrate; each with sutural stria very distinct, and commencing in a small fovea, dorsal stria represented by a large basal fovea only; epipleural furrow deep, lightly eurved, and terminated close to base and apex; punctures rather indistinct. *Metasternum* impressed between hind coxæ. *Abdomen* convex along middle. *Legs* unarmed and comparatively thin. Length 1 mm.

Hab. - N. S. Wales : Tamworth (Macleay Museum).

In size, colour, and antennæ like *R. pallida*, but otherwise very different. There are three specimens before me, apparently all females; but I have described them, as the large prothoracic foveæ should be very distinctive; the medio-basal fovea occupies fully half the width of the prothorax, is straight behind, and arched in front.

PSELAPHUS FERGUSONI, n.sp.

Q. Bright reddish-castaneous, elytra and appendages paler. Tip of elytra, base of abdomen on under-surface, and part of under-surface of head with dense, short pubescence, upper surface of abdomen with sparse pubescence, elsewhere almost or quite glabrous.

Head with a wide median groove not quite extending to base, a feeble elevation between eyes. Antennæ extending to middle coxæ; second joint shorter than first, but no narrower; ninth subovate, about once and one-half the length and almost twice the width of eighth; tenth slightly larger than ninth, but much the same shape; eleventh not as long as the two preceding joints combined, its apex obtuse. Palpi long and thin, club of apical joint about one-half the length of peduncle. *Prothorax* slightly longer than wide; close to base with a moderately wide, transverse impression, in which are four small foreæ. *Elytra* almost as long as wide; each with the sutural and dorsal striæ distinct, the latter gently curved. Length $1\frac{1}{4}$ mm.

Hab.-N. S. Wales: Sydney, Rope's Creek(E. W. Ferguson).

About the size of P. Leanus, and slightly smaller than P. tuberculifrons, but with considerably shorter antenne, whose terminal joints are also of a different shape; P. flavipalpis is slightly larger, differently clothed, the head wider, and antennæ somewhat longer; all the other species known to me are decidedly larger.

PSELAPHUS SUBSQUAMOSUS, n.sp.

Q. Bright reddish-castaneous, appendages more or less flavous. Rather densely (for the genus) clothed all over upper surface with short white pubescence, becoming very dense at tip of elytra, and at base of abdomen on undersurface.

Head with median groove shallow and partially obscured by clothing. Antennæ rather thin, second joint distinctly shorter and slightly narrower than first, joints of the club rather thinner, but otherwise as in the preceding species. Palpi (for the genus) not very long, club of apical joint the length of peduncle. *Prothorar* about as long as wide, basal half almost parallel-sided; a transverse impression at base, marked by three foveæ, but somewhat obscured by clothing. *Elytra* about as long as wide; each with the sutural and dorsal striæ distinct, the latter rather strongly curved. Length, $1\frac{3}{4}$ mm.

Hab.--New South Wales: Narromine (E. W. Ferguson).

The clothing causes a peculiar, greyish, scaly appearance on the upper surface, and renders the species so distinct, that I have not hesitated to describe the only female I have seen.

CTENISOPHUS SUBLONGICORNIS, n.sp.

 σ . Pale castaneous, palpi and tarsi still paler. Clothed with very short, whitish pubescence, denser at tip of elytra than elsewhere.

Head rather wide; the interocular foveæ smaller and shallower than usual. Antennæ long, extending almost to tip of elytra. *Prothorax* slightly wider than long, widest close to apex, sides thence oblique to base; with a large, shallow, medio-basal impression. *Elytra* slightly wider than long; each with the sutural stria distinct, the dorsal distinct to beyond the middle, but very feeble towards apex. *Metasternum* deeply grooved along middle. *Abdomen* with a wide and very feeble median impression on third segment on undersurface. *Legs* long and thin. Length $1\frac{1}{4}$ mm.

Hab.-Victoria: Portland (H. W. Davey).

In general appearance, rather close to C. longicornis, but rather more compact, antennae shorter and slightly stouter; the proportions of the joints are exactly as described for those of C. longicornis; but, in that species, the antennae are decidedly longer, so that their nine apical joints are about equal to the eleven of the present species.

CTENISOPHUS LONGICORNIS Lea.

There are sexes of this species in the Macleay Museum, from Wagga Wagga, New South Wales, but they differ from the types in being somewhat paler. This, however, is a common difference between Australian and Tasmanian specimens.

GERALLUS DECIPIENS, n.sp.

or. Dark reddish-castaneous, appendages somewhat paler. With pale and somewhat irregularly distributed pubescence; and with two upright bristles between eyes.

Head of moderate size, with a strong, deep, frontal impression, the hind margin of which is somewhat curved, between antennæ with a subtriangular elevation, the front of which is supplied with two feeble nodes, and the hind part of which overhangs the transverse impression; with dense and rather coarse punctures. Antennæ elongate, first joint (as viewed from sides) almost as long as the three following combined, eighth lightly transverse, ninth rather strongly, tenth still more strongly transverse, eleventh truncate-ovate. Palpi with apical joint moderately long. *Prothorax* almost as long as wide, widest at about apical third, non-foveate; with punctures slightly sparser than on head, but not smaller. Elytra wider than long; each with the sutural stria distinct, and the dorsal represented by an impression on basal fourth only; with clearly defined punctures, rather sparser than on prothorax. *Abdomen* with numerous but rather small punctures on upper surface; lower flattened along middle. *Metasternum* widely and rather shallowly excavated in middle. *Legs* long; front trochanters with a strong truncate tooth, middle subtriangularly dentate; front femora with a small, acute, subbasal tooth. Length, $1\frac{2}{3}-1\frac{3}{4}$ mm.

Hab.—Victoria(Macleay Museum).

The peculiar square tooth of the front trochanters readily distinguishes this from all previously described species; the punctures also are coarser. At first, it appears to belong to $Rytus \, subulatus$, but the palpi are as in Gerallus. From some directions, the lower hind part of the cephalic impression appears to have a small flavous fascicle, projecting horizon-tally forwards, but it is not very distinct.

TMESIPHORUS FOVEILATERIS, n.sp.

Reddish-castaneous; elytra, tarsi, and palpi paler. With rather short, dingy pubescence, denser at tip of elytra than elsewhere; a fascicle of golden hair on each side of base of head; lateral foveæ of prothorax filled with similar hairs.

Head with two rather small interocular foveæ, front rather deeply longitudinally impressed: densely punctate all over. Antennæ not very long; third to tenth joints transverse, ninth and tenth not very large, but much larger than the preceding ones; eleventh briefly ovate, longer than ninth and tenth combined. Palpi with a strong spine on second and third joints, apical joint strongly obtusely produced on one side, and acutely produced at apex. *Prothorax* about as long as wide, widest at about one-third from apex; with a small medio-basal fovea, and a much larger one on each side, but the latter filled with clothing; punctures as on head. *Elytra* moderately transverse; the dorsal stria on each rather wide, but terminated before middle; with clearly defined punctures, but smaller, sparser, and more irregularly distributed than on prothorax. Abdomen with a narrow carina on each side of second and third segments; under-surface convex, the first and second segments conspicuously fringed with somewhat golden clothing. Legs unarmed: front tibiæ somewhat curved and thickened in middle. Length, $2\frac{1}{2}$ mm.

llab.—Queensland: Townsville (H. H. D. Griffith, from F. P. Dodd).

The specimen described is probably a female, but the peculiar lateral foveæ of the prothorax render the species remarkably distinct. It is allied to T. brevicornis (also from Townsville), but is readily distinguished from that species by the absence of the median ridge from the second dorsal segment of abdomen; the upper surface of the abdomen is shining, whilst in T. brevicornis it is subopaque (a character omitted from the original description).

The species is almost certainly myrmccophilous or termitophilous, but there was no indication as to how the type was obtained.

PALIMBOLUS MAMILLATUS, n.sp. (Plate xvii., fig. 1).

o". Reddish-castaneous, head and prothorax somewhat darker. Rather densely clothed with long, yellowish pubescence.

Head rather elongate, with two small subbasal foveæ, antennary ridges rather long and parallel, the dividing groove not, very deep. Eyes small and prominent. Antennæ long, first joint (from the side) longer than second and third combined, fifth slightly longer than fourth, and just perceptibly longer than sixth, ninth slightly wider than eighth, and tenth than ninth, eleventh subovate, strongly notched on undersurface. Prothorax strongly convex, slightly longer than wide, sculpture more or less concealed by clothing. Elytra slightly wider than long, much wider and longer than prothorax ; punctures very indistinct. Abdomen long, strongly margined, fourth and fifth segments large; under-surface concave along middle, the apical segment foveate. *Metasternum* depressed along middle, each side of middle with a small conical tubercle. *Legs* rather long; hind trochanters each with a tooth as on metasternum; hind tibiæ with a strong inner median flange. Length, $4\frac{1}{4}$ mm.

Hab.--Tasmania: Mount Wellington (H. H. D. Griffith).

Readily distinguished from all other described species by the peculiar wide flange of the hind tibiæ; each flange commences at one-third from the base, is oblique to its widest part, then slightly curved, then pointed, and strongly notched to the tibia, where it ends at about one-third from the apex. The tibia itself is tipped with a small acute hook. The undersurface of the terminal joint of the antennæ is somewhat as in *P. Victoriæ*. The general shape is somewhat like that of *P. elegans* on an enlarged scale.

Collacerothorax, n.g.

Head rather short, deeply grooved along middle. Eyes of moderate size, lateral, and prominent. Antennæ rather short. Palpi small, first joint concealed, second thickened to apex and slightly curved, third rather stout, about one-half the length of second, fourth obovate, slightly shorter than second. *Prothorax* transverse, widest near apex, strongly sculptured. *Elytra* transverse. *Metasternum* of moderate length. *Abdomen* strongly margined on upper surface, third and fourth segments larger than the others, second tri-, the third bicarinated. *Leys* moderately short; tarsi with first joint very short, second moderately long, third longer than first and second combined, with two thin claws.

The general appearance of the insect described below is as of a stout, hairy *Palimbolus*; and, for the present, the genus may be placed between that and *Tryomorphus*, from both of which it is distinguished by the carinated abdomen. *Tmesiphorus*, with somewhat similar abdomen, has very different palpi. The sculpture of its prothorax is very peculiar, and the only prothorax figured by Raffray at all resembling it, is that of *A pharinodes squamosus*,* from Singapore; but it is not much like it, and the head and abdomen are very different.

COLLACEROTHORAX SCULPTICEPS, n.sp. (Plate xvii., figs. 2-4).

Dark reddish-castaneous, elytra (suture excepted), legs, and palpi paler. Clothed with numerous rather long, blackish hairs; and, in places (notably on abdomen, and under-surface), with shorter and pale pubescence.

llead lightly transverse; with a wide, deep, median groove, somewhat irregular in front and open behind, the groove bounded on each side by a ridge terminating posteriorly in an acute tooth directed obliquely backwards; between each ridge and the side, a shallow groove, the hind end of which is closed, and marked by a feeble tooth; with numerous, but partially concealed punctures. Antennæ rather short and stout, the three apical joints forming a rather wide club. Prothorax wider than head, rather suddenly dilated near apex; the dilated part, on each side, with a strong excavation, which is narrowed in front, and irregular towards base, filled with pubescence and hairs; with a strong, median impression on basal half; with numerous but usually concealed punctures. Elytra transverse. Sutural stria distinct, the dorsal represented by a rather short basal groove ; with small, sparse, and irregularly distributed punctures. Abdomen, at widest, slightly wider than elytra, second segment with three equidistant carinæ, of which the outer ones are smaller, but more prominent than the middle one, third with two carinæ not quite extending to apex; under-surface gently flattened along middle, the fifth segment semicircularly emarginate at apex Legs unarmed. Length, 21 mm.

^{*} Rev. d'Ent. 1890, Pl. ii., fig. 40.

Hab.-New South Wales: Blue Mountains, Sydney (E. W. Ferguson).

The sculpture of the prothorax is more or less obscured by the clothing. The base of the head, when viewed from behind, appears to rise above the prothorax in the form of four more or less conical tubercles. The two specimens before me are evidently of but one sex; and, despite the unarmed legs, are probably males. The one from Sydney differs from the type in being paler (its elytra are almost flavous), the eleventh joint of antennæ paler than tenth, and the clothing sparser and paler.

TYROMORPHUS FLAVIMANUS, n.sp.

 σ . Reddish-castaneous; club infuscate, palpi and tarsi flavous. With very short, pale pubescence.

Head rather strongly transverse, not including the eyes, about as long as wide; with a small fovea on each side slightly in advance of eyes, front depressed in middle. Antennæ extending to about middle of elytra; first joint about as long as second and third combined, second slightly larger than third, third to eighth subequal, ninth and tenth subequal and considerably larger than eighth; eleventh ovate, about as long as ninth and tenth combined, and somewhat wider. Prothorax almost as long as wide, widest near apex, sides thence feebly decreasing in width to base, with numerous small but clearly defined punctures; with a small medio-basal fovea. Elutra lightly transverse, each with the sutural stria distinct, the dorsal deep at base and continued to beyond the middle; with feeble but rather dense punctures. Metasternum widely excavated along middle; the excavation continued on abdomen almost to its apex. Middle trochanters with a wide triangular tooth; middle tibiæ forked at apex. Length, 2 (vix) mm.

Hab.-N. S. Wales: Blue Mountains (E. W. Ferguson).

Readily distinguished from T. nigricornis by the ventral excavation and middle legs. P. lavis has the middle tibiæ

dentate in middle, and the front trochanters armed; its surface also is very feebly punctured. In Raffray's Table^{*}, it would be associated with T. humeralis (except that the head could scarcely be called rounded), but it differs from the figure of that species in having the head shorter, with more prominent eyes, the middle tibiæ armed, and the front pair unarmed.

RYTUS INSIGNICORNIS, n.sp. (Plate xvii., fig. 5).

 \mathcal{J} . Reddish-castaneous, legs somewhat paler, palpi and tarsi still paler. Wtih moderately long, and not very dense, pale pubescence.

Ilead of moderate size, deeply transversely excavated towards the front, the excavation with a strong semicircular backward extension at middle, so that the extension appears to be margined by a strong, obtuse horn on each side; with a strong, curved elevation between antennæ, the elevation then narrowed and depressed posteriorly, and then with a strong tubercle at its apex, which is slightly in front of and between the obtuse horns; with moderately distinct punctures. Antennæ with first joint rather short and stout, second gently transverse, third and seventh each about twice as wide as long; fourth, fifth, and sixth each more than thrice as wide as long, and feebly concave on their undersurface; fifth widest of all; eighth almost as wide as seventh, but much shorter; ninth rather strongly, tenth moderately transverse; eleventh rather thin, slightly longer than the three preceding joints combined. Prothorax widest near apex, with moderately distinct punctures on sides, but feeble along middle. *Elytra* almost as long as wide : punctures very indistinct : each with two small basal fover. Metasternum moderately impressed. Abdomen gently flattened along middle of under-surface. Legs long : middle trochanters subtriangularly dentate. Length, 2 mm.

* These Proceedings, 1900, p.228.

Hab.-N. S. Wales: Narromine (E. W. Ferguson).

Readily distinguished from all others of the genus by its remarkable antennæ. The sculpture of the head is also remarkable.

RYTUS PORCELLUS Schfs.

There are before me three males (from the Blue Mountains and Sydney) that agree well with Raffray's notes on the types of R. porcellus, and 1 believe them to be that species. He thought that the species was probably R. corniger, but this is not the case, as the latter is a smaller species, with rather coarse punctures; and is much like R. Kingi.

H'AMOTOPSIS METASTERNALIS, n.sp.

o'. Reddish-castaneous; head, prothorax, and abdomen somewhat darker than elsewhere. With moderately dense, and not very short, yellowish pubescence.

Ilead, excluding eyes, decidedly longer than wide; with dense and rather coarse punctures, except in middle, which is shining and with two conspicuous but rather small foveæ; front rather deeply impressed between antennary ridges. Antennæ moderately long, first joint, from above, about as long as the two following combined; from the side, the three following combined; ninth slightly wider than eighth; tenth slightly longer and wider than ninth; eleventh very large, largely produced on one side. Palpi with apical joint very large, about as long as the two basal joints of antennæ. Prothorax strongly convex, longer than wide, widest at about apical third, thence rather strongly diminishing in width to base : each side near base with a rather large impression, the two connected across middle by a curved line; behind this line the punctures are denser and coarser than in front of it. Elytra lightly transverse; each with the sutural stria distinct and commencing in a small fovea, the dorsal subfoveate near base, but not traceable to middle; with small punctures.

Metasternum with a conspicuous median keel, commencing at the middle and overhanging the base of the abdomen like a conical tubercle. Abdomen scarcely flattened along middle of under-surface. Front trochanters with a small, acute tooth. Length, 3 mm.

Hab.-S. Australia: Adelaide (H. H. D. Griffith).

Readily distinguished from the two previously described species, by the metasternal keel. In size and general appearance, it is remarkably close to the male of *H. auricomus*, but the basal impressions of the elytra are larger. On the type, on the upper surface of its abdomen, on the second (apparently the first) segment, there is a very narrow longitudinal carina, but as it is slightly oblique and not exactly median, it may not be typical.

HAMOTOPSIS AUSTRALASIÆ Raffr.

Only the female of this species has been described. There are two males, 1rom Gayndah and Wide Bay, before me, that appear to belong to the species. They differ from the female in having the front trochanters armed with a small and moderately acute tooth, and the front femora with an obtuse but distinct subbasal tooth. The abdomen is flattened along the under-surface, and appears to have small irregular impressions.*

The male is readily distinguished from the male of *H. auricomus* by the femoral tooth: the tooth of the trochanter is also less acute and more depressed, and the front tibiæ are without a small apical spur.

SCHISTODACTYLUS BREVIPENNIS Lea.

Dr. Ferguson has a specimen of this species from the Blue Mountains, N.S.W.

^{*} One of the specimens is without its abdomen; and that of the other is very dirty, and I have not been able to clean it so as to see the sculpture clearly.

NEW SPECIES OF AUSTRALIAN COLEOPTERA,

Family SCYDMÆNIDÆ.

SCYDMÆNUS KINGENSIS, nom. nov.

S. Kingi Lea (nom. præocc.).

This name is proposed as a substitute for that of the King Island species, named after the late Rev. R. L. King; the name Kingi was previously used in the genus for a species from Gayndah.

Family SILPHIDÆ.

CLAMBUS FLAVIPES, n.sp.

Blackish-brown and highly polished; sides and base of prothorax and margins of elytra more or less diluted with red; appendages flavous; hind coxæ blackish-brown at the base, becoming paler towards apex. Slides with sparse, pale, and extremely short pubescence.

Elytra with rather dense but very minute punctures, and without subsutural striæ. Hind coxae with very minute punctures, and, as also the metasternum and abdomen, highly polished; each about as big as each side of metasternum. Length, 1 mm. (vix).*

Hab.-Tasmania: Gordon River (J. E. Philp).

Of the size of C. Simsoni, and also without subsutural striæ, but the upper surface is differently clothed, and the metasternum and hind coxæ are highly polished as in C. myr-mecophilus. The clubs of the antennæ of the type are concealed.

CLAMBUS PUBIVENTRIS, n.sp.

Blackish-brown and highly polished, sides and base of prothorax and margins of elytra more or less feebly diluted with red; under-surface, including hind coxæ, dark reddish-brown;

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^{*} The lengths given are with the head curved over in the usual position of dried specimens,

appendages of a somewhat dingy flavous, club black. Almost glabrous.

Elytra with very minute punctures; subsutural striæ distinct from basal fourth to apex. Hind *coxæ* larger than metasternum, and, as also the under-surface generally, clothed with fine pubescence. Length, 1 mm.

Hab.-Tasmania: Mount Wellington (A. M. Lea).

Smaller, darker, and less convex than *C. latens*. From *C. Tierensis* it differs in being smaller, less convex, and not entirely glabrous on the upper surface. At a glance, it appears to be glabrous, but the elytra have a few rather short setæ on the sides towards apex.

CLAMBUS LATENS, n.sp.

Of a rather dingy reddish-brown, but highly polished, prothoracic and elytral margins slightly paler, under-surface and appendages more or less flavous, but club blackish. Elytra with extremely sparse, short, and inconspicuous setæ.

Elytra with extremely minute punctures; subsutural striæ distinct from basal third to apex. Hind coxa about twice the size of metasternum, and, as also the under-surface generally, rather densely pubescent. Length, $1\frac{1}{4}$ mm.

Hab.—Tasmania: New Norfolk, in moss; Stonor, probably from tussocks (A. M. Lea).

Of the size, and with the subsutural striæ of *C. Tierensis*; but paler; and elytra with a few setæ, although much shorter and sparser than in *C. Tasmani*, from which also it is very different in other respects. At a glance, it is quite remarkably like some species of *Litochrus*.

CLAMBUS RUFOCASTANEUS, n.sp.

Reddish-castaneous and highly polished; appendages, including club, flavous. Elytra with a few long straggling hairs.

Elytra apparently impunctate; subsutural striæ distinct from basal third to apex. Hind *coxa* about once and one-

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half the size of metasternum, and, as also the under-surface generally, rather densely public public tength, 11mm.

Hab.-Tasmania: Huon River, in tussocks (A. M. Lea).

Rather smaller than *C. Tasmani*, and entirely pale, but with very similiar elothing, and with subsutural striæ.

CLAMBUS CORYLOPHOIDES, n.Sp.

Reddish-eastaneous, parts of elytra darker, appendages, hind coxæ excepted, flavous. With very short, pale, and, for the genus, dense pubescence.

Upper surface with very minute punctures, more distinct, but still very small, on elytra than elsewhere; subsutural striæ rather faint, but traceable from near middle almost to apex. Hind *coxæ* about the size of metasternum, and, as also the under-surface generally, with dense fine pubescence. Length $\frac{4}{5}$ mm.

Hab.—Tasmania : Hobart(A. M. Lea).

The upper surface with dense fine pubescence (much more noticeable than in *C. Simsoni*) readily distinguishes it from all other species known to me. At a glance, it looks like a member of the *Corylophidæ*. It is rather more convex than usual, with the elytra strongly narrowed posteriorly. When the head is closely applied to the under-surface, as in dried specimens, it almost extends to the hind coxæ. The subsutural striæ are very feeble. The clubs of the antennæ are concealed on the three specimens before me.

CLAMBUS TASMANI Blackb.

This species may be obtained abundantly in moss in many parts of Tasmania. The suture is usually paler than the discs of the elytra, but an occasional specimen may have the elytra entirely black.

CLAMBUS SIMSONI Blackb.

This species is abundant in Tasmania, and I have specimens from many parts of New South Wales. It is obtainable from moss, but occurs on fence-tops, &c., at dusk. Mr. Simson has

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kindly lent me a specimen bearing his own number, 3344, and a name-label of Mr. Blackburn's.

The species is readily known by its fine elytral pubescence, and the absence of the subsutural stria. Its colouring, however, is decidedly variable. Tasmanian specimens have the elytra usually of an almost uniform smoky-brown, sometimes paler on the disc, with the pale markings occasionally appearing almost like two large spots. Occasionally only a large subtriangular patch about the seutellum is dark. The prothorax usually has the sides and the extreme base paler than the disc.

Specimens from New South Wales are usually paler than Tasmanian ones, and two before me have the upper surface entirely pale.

CLAMBUS TIERENSIS Blackb.

Mr. Blackburn described the colour of this species as "marginibus lateralibus anguste rufescentibus." This applies to several specimens before me, but in the majority of them the elytra are entirely dark. Occasionally the base of the prothorax is narrowly reddish. In the description no mention is made of a subsutural stria; but later on (under that of *tropicus*) it is mentioned as being present.

The species (Mr. Simson's 3520 and 3703) is fairly common in Tasmania, and specimens may occasionally be taken in moss.

ANISOTOMA WIBURDI, n.sp.

Reddish-castaneous, appendages somewhat paler.

Head with dense minute punctures. Club large, fully one-half the length of antennæ. Prothorax with punctures as on head, but not quite as dense. Elytra with rows of rather small but distinct punctures, becoming absent at base and on shoulders, and semidouble in places, especially towards the sides; interstices with minute but rather clearly defined punctures, as distinct on shoulders as elsewhere. Metasternum with dense and fairly coarse punctures, but much finer in middle. Legs short and wide; hind femora somewhat angularly dilated at inner apex; front tibiæ moderately wide and with a few stiff setæ, the others wider and with more numerous set æ of various sizes. Length $2\frac{1}{2}$ mm.

Hab.—N. S. Wales : Vicinity of Jenolan Caves (J. C. Wiburd), Forest Reefs(A. M. Lea).

Very much the size and appearance of A. Tasmanice, but hind femora edentate; they are, however, somewhat angularly dilated at the inner apex.

The specimen from Forest Reefs differs in being almost flavous, but is probably immature.

ANISOTOMA MICROPUNCTATA, n.sp.

Pale castaneous, appendages still paler.

Head and *prothorax* scarcely visibly punctate. *Elytra* with very feeble rows of feeble punctures, not extending to base or shoulders, the interstices without visible punctures. *Metasternum* densely punctate at sides, but shining and impunctate along middle. *Leys* short and wide; hind femora somewhat angularly dilated at inner apex, but not dentate; tibiæ wide, with short stiff seta. Length l_3^1 mm.

Hab.-N. S. Wales : Tweed River(A. M. Lea).

A small species, with unusually fine punctures.

ANISOTOMA BICOLORICLAVA, n.sp.

Pale castaneous, appendages more or less flavous, but club (except apical joint) infuscate.

Head with dense and minute but fairly distinct punctures. *Prothorax* with sparser and still smaller punctures. *Elytra* with regular rows of distinct punctures, terminated some distance from base; the interstices impunctate. *Metasternum* with dense and fairly strong punctures at sides, becoming smaller towards, and quite absent from, middle, which is smooth and shining. *Legs* short and wide; hind femora each with a triangular flange-like extension at inner apex; tibiæ wide, especially the four hind ones, and with short stiff seta. Length l_2^1 mm.

Hab.—Tasmania: Huon and Jordan Rivers, Launceston, Frankford(A. M. Lea).

Readily distinguished by its partly dark club; in A. myrmecophila the club is entirely dark and the interstices are punctate, The hind femora each have an almost equilaterally triangular extension of the inner apex, which, however, from some directions appears as a thin apical flange. It should possibly be regarded as a tooth, but, if so, it is very different from the long and comparatively narrow tooth so conspicuous in *A. Tasmanice* and the following species.

ANISOTOMA AMMOPHILA, n.sp.

Reddish-castaneous, appendages somewhat paler.

Head with dense but very minute punctures. *Prothorax* with extremely minute punctures, scarcely visible except on sides. *Elytra* with regular rows of distinct but small punctures, not extending to base; interstices impunctate, but a few small punctures about shoulders. *Metasternum* with dense punctures at sides. *Legs* short and wide; hind femora at apex each with a strong acute inner tooth; tibiæ wide, especially the four hind ones and with short, stiff seta. Length 2(vix)mm.

Hab.-Tasmania : Hobart(A. M. Lea).

In general appearance close to A. myrmecophila and A. Tasmania; from the latter, distinguished by the impunctate elytral interstices; and from the former, by the armed femora; the femoral teeth are large, but rather shorter and stouter than in A. Tasmania. A single specimen was taken in sand, whilst hunting for species of Phycochus at Sandy Bay.

The Australian species of this genus, at any rate those known to me, so closely resemble each other in general outlines, that they are not very easily distinguished, and the following table may therefore be useful.

ł	Ind femora each with a long strong tooth at apex.	
	Interstices with small punctures	Tasmania Oll.
	Interstices without punctures	ammophila, n.sp.
Hind femora edentate.*		
	Club partly dark	bicoloriclara, n.sp.
	Club entirely dark	<i>myrmecophila</i> Lea.
	Club entirely pale.	
	Interstices impunctate	micropunctata, n.sp.
	Interstices with small punctures	Wiburdi, n.sp.

• They sometimes have a thin, flange-like extension, however.

CHLOROBAPTA TIBIALIS, n.sp.

 \mathcal{J} . Black, highly polished; with bright green markings. Upper surface with short, sparse setæ, but between eyes denser and longer; under-surface with irregularly distributed setæ and hairs, much longer and stouter on hind tibiæ than elsewhere.

Head with irregular punctures, coarser and denser between eves than elsewhere, an impunctate space in middle of neck; clypeus with a wide shallow groove on each side, its apex widely rounded and thickened at sides, and very feebly incurved to middle. Prothorax moderately transverse, sides thickened, the basal twothirds almost parallel; with small scattered punctures. Elytra with a wide irregular longitudinal impression along middle of each disc; with small and sparse punctures; about sides and apex with sinuous transverse impressions. Abdomen with a median depression on four basal segments. Pygidium with concentric impressions starting from two small spaces at its extreme tip. Legs obliquely impressed: front tibiæ thin, with a curved apical tooth and two smaller ones; middle tibiæ stouter, apex with two acute teeth (in addition to the spines), and a small median one; hind tibiæ still stouter, near the base with a conspicuous fascicle of long hairs, about middle with a strong tooth, then strongly incurved to apex, with the apex itself produced as a strong hook continuing the curve, middle claws uneven, the inner one much as the others, but the outer one somewhat shorter, much wider, strongly curved on its outer edge, and notched near its base on the inner edge. Length 19 mm.

llab.- Queensland : Ingham(type in Coll. C. French).

The specimen described at first appeared to me to be a variety of C. Besti, but it is at once distinguished from that species by the hind tibiæ; the markings differ in being of a much brighter green; the black shoulder-spot of C. Besti is, in this species, produced obliquely backwards so as to join in with the median spot, but this is not enlarged. The punctures also are considerably smaller, this being notably the case on the prothorax.

The green occupies the greater portion of the clypeus. On the prothorax, it margins the sides and apex; and, at about onethird from the apex, is marked by a small black spot on each side. On the elytra, an oblique irregular vitta extends from each shoulder to about the middle: beyond the middle there is an irregular fascia not quite touching the suture; each side of the apex has a narrow curved stripe, and there is a narrow stripe on each outer margin from the base almost to the postmedian fascia. On the pygidium, there is a subtriangular spot on each side, each with a small median black spot. On the mesosternum, there is a small spot on each side; and a larger one on each side of the metasternum. On the abdomen, the first segment has a curved spot on each side partly visible from above: the second, third, and fourth have a transverse spot on each side of the middle, and a smaller subtriangular one on each side; and the fifth has a wide median spot or fascia not quite extending to the sides.

PLATEDELOSIS VELUTINA Macl.

Mr. C. French has, from Somerset (Queensland), a specimen of this species, with the whole of the upper surface highly polished. A specimen in my own collection, from the Endeavour River, has the derm polished in patches. Under a Coddington lens, the polish appears as if due to varnish, but I think it is probably due to the effects of some preservative.

CACOCHROA GYMNOPLEURA Fisch.

Mr. C. French has, from the Endeavour River, a specimen of this species, that differs from the typical form in having the elytra darker than the prothorax, the latter with a rather small infuscate spot on each side (smaller and more marginal than in the bimaculate variety of *C. variabilis*). The pygidium is of a brighter colour, with only the extreme margins blackish; the femora reddish, and the tibiæ and tarsi darker, but not black (as in the normal form).

A specimen in my own collection, from near the Jenolan Caves, is smaller, more convex, and hairier than usual, with the prothorax, legs, and pygidium entirely deep black, and the elytra blackish only about the shoulders.

Family LYMEXYLONIDÆ.

HYLECETUS FUSCIPENNIS, n.sp. (Plate xvii., fig.7).

Q. Reddish-castaneous, sides of prothorax infuscated, elytra infuscated except about base, which is reddish-flavous; antennæ, except three basal joints, and abdomen infuscated; meso- and metasternum and legs more or less flavous. With very fine pubescence present, but less noticeable on eyes than elsewhere.

Head somewhat rounded, with a distinct neck, near base depressed in middle; with dense, clearly defined punctures. Eyes moderately separated. Antennæ with second joint shorter than first; third slightly longer than first, and as long as fourth but slightly narrower; fourth to tenth subtriangular, very feebly decreasing in size; eleventh elongateovate, not as long as the two preceding joints combined. *Prothorax* distinctly longer than wide, sides, apex, and front angles rounded, base bisinuate; punctures rather smaller and less crowded than on head. *Scutellum* about as long as wide; with dense punctures. *Elytra* about four times as long as wide, with small dense punctures: each with three feeble costæ. *Legs* long and thin. Length, $11\frac{1}{2}$ mm.

Hab.—N.S.W.: Forest Reefs (A. M. Lea).

There are both sexes of the species before me, but the female was described as the male(7 mm. in length); and has both antennæ broken; of the joints that are left, the fourth to ninth are produced more to one side than in the female, so as to be subpectinate, rather than subtriangular; its eyes are rather closer together, but the difference in this respect is not striking. The ovipositor of the type is extended, and measures $7\frac{1}{2}$ mm.

Readily distinguished from H. linearis, and H. pervagus, by its partly dark elytra: and from H. australis, by not being uniformly dark.

HYLECCETUS VIGILANS, n.sp. (Plate xvii., fig. 8).

Head blackish, prothorax and scutellum reddish-castaneous; elytra reddish-testaceous; under-surface and appendages paler. With moderately dense, short, depressed pubescence, becoming erect on eyes.

Head very densely punctate. Eyes large, projecting laterally, almost touching along middle. Antennæ with third joint moderately long and triangular, fourth to tenth each rather strongly produced to one side, eleventh almost as long as ninth and tenth combined. *Prothorax* longer than wide, front angles strongly rounded, sides widest near apex, thence oblique to base: with very dense punctures, denser and smaller on an obtusely raised medio-basal space than elsewhere. *Scutellum* longer than wide, apex feebly notched; with very dense punctures. *Elytra* about four or five times as long as wide, punctures smaller and less crowded than on prothorax: each with three feeble costæ, of which the outer one is very faint. *Legs* long and thin. Length, 18 mm.

Hab.-Queensland: Little Mulgrave River (H. Hacker).

The projection of the eyes at the sides causes the base of the head to appear as a wide neck; they almost touch for about one-half their length, so that the part of the head between them appears as a triangle, with its apex narrowly produced. The only specimen before me had a process from the tip of the abdomen that was possibly an ovipositor, although the approximation of the eyes would appear to be masculine. The eleventh joint is of rather curious shape, and appears almost like two joints soldered together—a basal one, somewhat like the tenth, and an apical cone-shaped one. The eyes are much larger and closer together than those of any previously described Australian species.

HYLECCETUS AUSTRALIS Er.

This species varies in length from $7\frac{1}{2}$ to $12\frac{1}{2}$ mm. The prothoracic impression, although fairly wide, is usually faint.

Family PTINIDÆ.

PTINUS MEDIOGLABER, n.sp.

Black, appendages reddish. Upper surface in parts with dense variegated clothing, and with more or less erect dark setæ; under-surface and legs with rather dense pale pubes-cence.

Antennæ long and thin. Prothorax longer than wide, widest at apical third; with dense, normally concealed punctures. Elytra rather long, shoulders rounded, thence to apical third parallel-sided; with regular rows of fairly large, suboblong punctures; interstices almost or quite impunctate. Length, $2\frac{1}{2}$ mm.

Hab.---Victoria: Wangaratta (A. M. Lea).

In general appearance somewhat like a large specimen of P. attritus, but differs in having the shoulders much less rounded (much like those of P. eminens or P. exulans, whilst in P. attritus they resemble those of the introduced P. tectus); the glabrous space between the subbasal and postmedian clothing larger, and more perfectly glabrous; the pubescence rather more compact and more prettily variegated, and the erect setæ rather shorter.

On the prothorax, the clothing is mostly dark brown, almost black, and in four longitudinal ridges or fascicles, but with a conspicuous white median line, and a white, variegated with golden, basal line; on the scutellum, it is white; on the elytra, on the basal fourth, it is white, variegated with golden, then to beyond the middle the surface, except for a few erect setæ, is glabrous; then there is a conspicuous white fascia not quite touching the suture or sides; on each side of the suture commencing at the fascia, extending to the apex, and then directed along the sides almost to the fascia, the clothing is golden, the enclosed spaces being almost glabrous. On the head, there is a narrow median line of whitish clothing, and the eyes are somewhat indistinctly encircled with white.

PTINUS GLORIOSUS, n.sp.

Black, appendages somewhat reddish. With dense golden brown clothing, variegated with white and stramineous; elytra, in addition, with rather long brownish hairs on setæ; under-surface and legs with dense whitish pubescence.

Antennæ long and thin. Prothorax slightly wider than long; with dense, normally concealed punctures. Elytra strongly convex; briffely ovate, shoulders strongly rounded; with regular rows of suboblong punctures, mostly concealed by clothing. Length, $2-2\frac{1}{4}$ mm.

Hab.-W. Australia: Swan River (A. M. Lea).

Most of the clothing is almost of the same lovely colour as the spots of P. eminens, but the elytra are of very different shape, and the prothorax has conspicuous basal markings. On the prothorax, the clothing, except for a conspicuous snowy patch on each side of the base, is entirely golden-brown, and in four conspicuous ridges; on the elytra, the golden-brown clothing covers most of the surface, but leaves a cross-shaped glabrous space, of which the upright commences on the suture at about one-fifth from the base, and extends almost, or quite, to the apex, and is irregularly bounded behind the middle by white or stramineous clothing (the only pale clothing on the elytra); the cross-piece is almost median, and is not quite straight. On partially abraded specimens, the cross is not very evident, and normally it is often inflated on each side towards the apex, so as to be somewhat anchor-shaped. There are five specimens before me, all differing slightly in size, but with almost identical clothing.

PTINUS ANCHORALIS, n.sp.

Black, appendages reddish. Clothing, except on elytra, much as in the preceding species. Shape and sculpture much the same. Length, $2\frac{1}{2}$ mm.

Hab.-W. Australia: Pelsart Island (A. M. Lea).

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The clothing on the prothorax, except that the golden tone of the ridges is not quite so evident, under-surface and legs, and the setæ on the elytra are as in the preceding species; but the elytral pubescence is denser, distinctly paler than on the prothorax (except the snowy basal spots), shorter and of uniform colour throughout. The glabrous space is also decidedly anchor-shaped, with its various parts rather narrower. It is also somewhat larger and wider, and slightly less convex.

PTINUS CUPREONIGER, n.sp.

Black with a distinct coppery gloss, appendages reddish. With dense brown clothing, variegated with white on the elytra, on which also there are rather long hairs or setæ; under-surface with short, dense, brownish pubescence, becoming somewhat paler on sides.

Antennæ decidedly long and rather thin. Prothorax almost as wide as long, sides strongly rounded, base slightly narrower than apex; with very dense punctures, most of which are visible before abrasion. Elytra ovate, strongly convex: with regular rows of somewhat angular and rather large punctures; interstices with sparse and minute punctures or none. Under-surface with rather larger punctures than usual. Length, $2\frac{1}{4}$ - $2\frac{1}{2}$ mm.

Hab.—Tasmania: Stanley, ten specimens from tussocks on summit of the "Nut" (A. M. Lea).

Apparently allied to P. *imulus*, but the prothorax is distinctly narrowed to the base, where there are also no patches of yellowish pubescence. The derm has a gloss somewhat as in P. *adeps*, but the two species have little else in common.

There are four distinct fascicles on the prothorax ; and, on abrasion, they are seen to be supported by feeble tubercular swellings. On the elytra, the pubescence is much sparser than on the prothorax ; and a large transverse median space is, except for erect setæ, almost or quite glabrous ; towards the base and again beyond the middle, there is some white pubescence that sometimes is distinctly fasciate in arrangement.

PTINUS ALBOHUMERALIS, n.sp.

Very dark chestnut-brown, appendages not much paler. Prothorax with dense chestnut-brown pubescence in four conspicuous ridges; elytra with dense reddish pubescence, except for a white spot on each shoulder, scutellum also with white pubescence; elytra with rather long reddish erect setæ; under-surface and legs with short dense greyish pubescence.

Antennæ long and fairly stout. Prothorax about as wide as long, sides strongly rounded, base narrower than apex, with a glabrous median line, and a glabrous subbasal one; punctures normally concealed. Elytra rather elongateovate, moderately convex; with regular rows of suboblong, partially concealed, punctures. Length, 3 mm.

Hab.-N.S.W.: Glen Innes (A. M. Lea).

The beautiful elytral pubescence is of a redder tone than in P. exulans; the shoulders are more strongly rounded, the white spots are less numerous on elytra, and absent from prothorax, the latter has a glabrous median line, etc. In shape, it is much like P. egenus, but the clothing is denser and brighter, and on the prothorax (when viewed from behind) appears in four conspicuous lines, with the glabrous median line much narrower; the antennæ are also somewhat shorter.

PTINUS MICROSCOPICUS, n.sp.

Very pale castaneous, almost flavous. With somewhat golden and not very dense pubescence; elytra, in addition, with moderately long erect hairs or setæ; base of prothorax with snowy clothing. Under-surface and legs with short, dense, white pubescence.

Antennæ long and thin. Prothorax about as long as wide, sides moderately rounded, base scarcely narrower than apex; as long, sides strongly rounded, base narrower than apex. with dense, partially concealed punctures. Elytra ovate, moderately convex; with regular rows of suboblong, partially concealed punctures. Length, $1-1\frac{1}{4}$ mm.

Hab.-W. Australia: Swan River (A. M. Lea).

Readily distinguished from all previously described Australian species, by its minute size. On one of the two specimens before me, the clothing on the elytra is feebly variegated.

PTINUS ALBOMACULATUS Macl.

Black, elytra with a purplish gloss. Clothed with short, stiff, erect, black setæ; with conspicuous snowy spots on head, scutellum, and elytra; under-surface and legs with rather dense, but not uniform, white or whitish pubescence.

Head densely and rugosely punctate. Antennæ long and not very thin. Prothorax slightly longer than wide, at base and apex with rows of distinct punctures, the intervening space with rounded sides, convex; with dense and somewhat flattened granules. Elytra about twice as wide as prothorax, shoulders rounded, sides thence parallel to near apex; with rows of rather large, deep, suboblong punctures, and with a short scutellar row; interstices impunctate. Length, 3²/₄ mm.

Hab.—Queensland: Townsville (H. J. Carter; from F. P. Dodd).

On the head, the snowy clothing forms a spot close to each eye, entirely clothes the scutellum, forms a spot behind the shoulder (common to the seventh and eighth interstices), and a transverse marking beyond the middle, on the third to sixth (inclusive) interstices. The specimens before me are marked "Believe ant-friends."

I had the description of this species drawn up as new; and, although the specimens do not quite agree with Macleay's description of P. albomaculatus, I thought it advisable to ask Mr. Carter to compare one with the type of that species. This he did, and wrote that "their upper surfaces were identical in every respect." A fuller description, however, should be useful to Coleopterists.

PTINUS NIVEONOTATUS, n.sp.

Black, very shining, elytra with a slight purplish gloss. Clothed with moderately long, erect, blackish setæ; head with a white spot close to each eye, scutellum with snowy clothing, each elytron with a rounded postmedian snowy spot, common to the third and fourth interstices, under-surface with whitish clothing, and somewhat similar clothing on legs.

Head with partly concealed punctures; with a narrow median carina. Antennæ long and thin. *Prothorax* longer than wide, sides decreasing in width from apex to near base, and then increasing to base; base with one, the apex with two rows of distinct punctures, the intervening space smooth and impunctate. *Elytra* twice as wide as the narrowest part of prothorax, shoulders rounded, sides parallel to near apex; with rows of rather small but deep punctures, and with remnants of a scutellar row; interstices impunctate. Length, $2\frac{1}{2}$ mm.

Hab.-Darnley Island (H. Elgner).

A small, shining species, with longer antennæ than is usual amongst black-legged species.

The Australian species of *Ptinus* known to me may be tabulated as follows :—

A. Elytra parallel-sided, with shoulders lightly rounded.

a. Appendages black or almost so.	
b. Elytra with pale clothing about suture and	apex adeps Oll.
bb. Elytra without pale clothing there.	
c. Postmedian markings rounded	niveonotatus, n.sp.
cc. Postmedian markings transverse	albomaculatus Mael.
aa. Appendages more or less reddish.	
d. Clothing nowhere black	exulans Er.
dd. Clothing partly blackish.	
e. Elytra with a glabrous median space	medioglaber, n.sp.
ee. Elytra without such a space	eminens Oll.

AA. Erytra ovate, not paranei-sided.	
B. Size very minute	.microscopicus, n.sp.
BB. Size ordinary.	
C. Elytral markings confined to shoulders.	
f. Prothoracic clothing in four conspicuous ridges.	. albohumeralis, n. sp.
f. Prothoracic clothing not in such ridges	egenns Oll.
CC. Elytral markings not confined to shoulders.	
D. Prothorax with pale clothing along middle	attritus Oll.
DD. Prothorax without a pale median line.	
E. Prothorax without pale basal markings	. cupreoniger, n.sp.
EE. Prothorax with snowy basal markings.	
F. Elytral pubescence variegated	gloriosus, n.sp.
FF. Elytral pubescence of uniform colour.	

Family BOSTRYCHIDÆ.

XYLOPSOCUS BISPINOSUS Macl.(3).

X. elongatula Macl.(Q); X. Leai Lesne(Q).

In examining some twigs of the cultivated fig, in December, 1903, I saw numerous holes made by these insects. In most instances, the hole was made close to a bud, and went almost round the twig, just under the bark. In nearly every instance, two insects were in each drill: the one nearest the entrance and always with its tail blocking up the opening was a male; the other, which was always at the head of the drill, was a female. I never saw these positions reversed.

The explanation seems to be that the males guard the entrance to the drill to prevent the females being devoured by *Cleridæ*, or other insects, which devour so many small boring beetles. Frequently when examined, the male was found dead, but the female living; in other instances, both were found dead, so that it would appear that, even in death, the male protects the young brood. The synonymy is now first recorded.

RHIZOPERTHA DOMINICA, Fabr.

Ent. Syst. 1, 2, p. 359; Lesne, Ann. Soc. Ent. Fr., 1897, p. 332; *R. picea* Marsh; *R. rufa* Hope.

This almost cosmopolitan species can now be recorded from Australia, as it has been sent to me from Cape York (H.

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Elgner) and New South Wales (Manilla and Wellington; W. W. Froggatt). Mr. Froggatt informs me that the Wellington specimens were taken from wheat-grains. Monsieur Lesne (to whom I am indebted for the identification) records it as eating biscuits, etc.

Family TENEBRIONIDÆ.

TYPHLULOMA, n.g.

Head wide, sides dilated to in front of middle. Eyes absent. Mandibles short, acutely notched near apex. Antennæ short, most of the joints strongly transverse. Palpi short. *Prothorax* subquadrate. *Scutellum* minute. *Elytra* parallel-sided to near apex; epipleuræ rather wide at the base. *Metasternum* moderately long, episterna moderately wide. *Legs* short and stout; tibiæ bispinose at apex, the front pair strongly dentate externally.

The species described below has a strong general appearance as of a small Achthosus, or as if belonging to Uloma or Ulomoides, but is readily distinguished from all of the Ulomides by the absence of eyes. In catalogues, it should be placed near Uloma. It is by far the largest blind species as yet recorded from Australia, and the only one from Queensland, although it is practically certain that Rodwayia occurs there, and probably Illaphanus as well.

TYPHLULOMA INOPS, n.sp. (Plate xvii., fig. 9).

Oblong-elliptic, subdepressed. Reddish-castaneous. Glabrous, except for appendages.

Head about once and one-half as wide as long; clypeal suture very feeble posteriorly; with numerous rather small but clearly defined punctures. Antennæ inserted under the slightly overhanging sides; first joint rather short; second moderately, all the others strongly transverse; second to sixth slightly increasing in width at apex; seventh to ninth much more so; tenth slightly wider than ninth; eleventh

longer and slightly narrower than tenth, its apex semicircular. Prothorar slightly wider than long, sides near apex gently diminishing in width to apex itself, which is gently incurved to middle, base truncate and hind angles almost rectangular; with clearly defined punctures of somewhat irregular size, but none very large. *Elytra* with regular rows of rather large round punctures, in rather feeble striæ, the interstices with sparse and minute punctures; epipleuræ with dense and rather coarse punctures about base, but much smaller and sparser elsewhere. Under-surface with round and usually clearly defined punctures. Abdomen with first segment longer than second, second longer than third, and slightly longer than fifth, third longer than fourth. Front tibice wide, their external apical two-thirds with four strong teeth, middle pair slightly longer, not so wide and spinose on external edge, hind pair spinose only at tip. Length, 41 mm.

Hab.—Queensland: Little Mulgrave River (H. Hacker).

The type was sent in spirits, with many other small beetles, a few of which were certainly from ants' nests, but many were not. Mr. Hacker when written to, could give me no information as to how he obtained it.

Coripera Adamsi, n.sp.

Black, with a faint coppery gloss in places; tibiæ with a slight purplish gloss; antennal joints in parts diluted with red.

Head densely granulate, and with a number of shallow irregular depressions. *Prothorax* moderately transverse; with numerous small granules, and small, shallow, irregular depressions: margins wide, obliquely raised, and coarsely serrated or lobed. *Scutellum* curvilinearly triangular. *Elytra* fcebly raised along suture and sides; with small, dense, and somewhat irregularly distributed punctures; with numerous minute, subobsolete granules, and with numerous, small, shining granules of not uniform size, and becoming more numerous towards and on sides, which, in consequence, appear irregularly serrated; flanks also with dense punctures, subobsolete minute granules and small shining ones. Undersurface in parts shining, in parts wrinkled, parts of sterna and of head granulated. Legs rather long and thin. Length, 14 mm.

Ilab.-Tasmania: Magnet (O. L. Adams).

I have received many curious insects from Mr. Adams, but this is an exceptionally fine species. It was in perfect condition, when first received ; but now (owing to postal vicissitudes) has all its appendages damaged. It is remarkably distinct from all previously described species. Each prothoracic margin is divided, as it were, into three lobes; the apical one is large and feebly divided into two; the median one is slightly larger, and more distinctly divided ; then there is a deep notch, and a smaller, simple lobe. The granulation of the elytra is also very distinctive.

Family EROTYLLIDÆ.

EPISCAPHULA HERCULES, n.sp. (Plate xvii., fig. 10).

Black, shining; an irregular stripe on each side of prothorax, a spot on each shoulder, another between it and scutellum, and a subapical spot on each elytron, dull red. Apex of tibiæ, and lower surface of three basal joints of tarsi, with dense reddish setæ.

Head with moderately distinct punctures behind eyes and on clypeus, elsewhere almost or quite impunctate. Prothorax about once and one-fourth as wide as long; each side of base with a narrow, oblique, distinct, impunctate impression. Elytra with distinct but small \downarrow unctures in regular series: interstices with sparse and still smaller punctures. Abdomen with distinct punctures along middle and at apex. Front tibiæ with a subtriangular extension at the basal third. Length, 23 mm.

Hab.-Queensland: Coen (C. French).

478 NEW SPECIES OF AUSTRALIAN COLEOPTERA,

A single specimen of this magnificent insect is before me. It differs from E. gigas (the largest species hitherto known) in being much larger, more parallel-sided, and with the prothoracic markings longitudinal instead of transverse; the marking on each side is constricted in the middle, and towards the apex becomes dilated, and then subrounded; towards the base it is strongly bifurcated; the middle is occupied by a black angular patch which is strongly narrowed towards the apex and less strongly to the base; on each side of the base there is a black angular projection. The prothorax also is without the patch of large basal punctures on each side. The humeral markings are not connected as in E. gigas; and the subapical spot on each elvtron is smaller and more rounded. The scutellum is also more transverse. The subtriangular extension of the front tibiæ is probably sexual. In some lights, the antennæ and front legs appear to be feebly diluted with red.

EPISCAPHULA GIGAS Macl. (Plate xvii., fig. 11).

A sketch of the markings of this species is given for comparison with those of E. hercules.

EXPLANATION OF PLATE XVII.

Fig.1.-Palimbolus mamillatus Lea; hind leg.

Fig.2.—Collacerothorax sculpticeps Lea.

Fig. 3. -C. sculpticeps; side-view of head.

Fig.4.—C. sculpticeps; base of head, from behind.

Fig.5. — Rytus insignicornis Lea.

Fig. 6. - Chlorobapta tibialis Lea.

Fig.7. - Hylecætus fuscipennis Lea.

Fig.8.-H. vigilans Lea; head and prothorax.

Fig.9. — Typhluloma inops Lea.

Fig. 10. - Episcaphula hercules Lea.

Fig.11. - E. gigas Macl.; markings.

Elgner) and New South Wales (Manilla and Wellington; W. W. Froggatt). Mr. Froggatt informs me that the Wellington specimens were taken from wheat-grains. Monsieur Lesne (to whom I am indebted for the identification) records it as eating bisenits, etc.

Family TENEBRIONIDÆ.

TYPHLULOMA, n.g.

Head wide, sides dilated to in front of middle. Eyes absent. Mandibles short, acutely notched near apex. Antennæ short, most of the joints strongly transverse. Palpi short. *Prothorax* subquadrate. *Scutellum* minute. *Elytra* parallel-sided to near apex; epipleuræ rather wide at the base. *Metasternum* moderately long, episterna moderately wide. *Legs* short and stout; tibiæ bispinose at apex, the front pair strongly dentate externally.

The species described below has a strong general appearance as of a small *Achthosus*, or as if belonging to *Uloma* or *Ulomoides*, but is readily distinguished from all of the *Ulomides* by the absence of eyes. In catalogues, it should be placed near *Uloma*. It is by far the largest blind species as yet recorded from Australia, and the only one from Queensland, although it is practically certain that *Rodwayia* occurs there, and probably *Illaphanus* as well.

TYPHLULOMA INOPS, n.sp. (Plate xvii., fig. 9).

Oblong-elliptic, subdepressed. Reddish-castaneous. Glabrous, except for appendages.

Head about once and one-half as wide as long; clypeal suture very feeble posteriorly; with numerous rather small but clearly defined punctures. Antennæ inserted under the slightly overhanging sides; first joint rather short; second moderately, all the others strongly transverse; second to sixth slightly increasing in width at apex; seventh to ninth much more so; tenth slightly wider than ninth; eleventh

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Fig. 11. - E. gigas Mael.; markings.